

ABSTRACT OF THE DISCLOSURE

Treatment of substrates, formation of structures, and formation of multilayer structures using contact masks are disclosed where a non-parallel or non-simultaneous mating of various mask contact surfaces to a substrate surface occurs. Some embodiments involve bringing a relative planar mask contact surface and a relative planar substrate surface together at a small angle (but larger than an alignment tolerance associated with the system). Some embodiments involve flexing a mask to make it non-planar and bringing it into contact with a substrate such that progressively more contact between the mask and substrate occur until complete mating is achieved. Some embodiments involve use of gas or liquid pressure to bow a flexible or semi-flexible mask and use a linear actuator to bring the mating surfaces together and to bring the mask into a more planar configuration.